

SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:94, SEQ ID NO:96, SEQ ID NO:99, SEQ ID NO:102, and SEQ ID NO:104; and

(b) an isolated protein of at least about 20 amino acids in length, wherein said protein has an at least 20 contiguous amino acid region identical in sequence to a 20 contiguous amino acid region selected from the group consisting of SEQ ID NO:92, SEQ ID NO:97, SEQ ID NO:100, and SEQ ID NO:105,

wherein said isolated protein of (a) or (b) elicits an immune response against a canine IL-13 protein or has IL-13 activity.

34. (New) The isolated protein of Claim 33, wherein said protein is selected from the group consisting of:

(a) a protein having an amino acid sequence selected from the group consisting of SEQ ID NO:92, SEQ ID NO:97, SEQ ID NO:100, and SEQ ID NO:105; and

(b) a protein encoded by an allelic variant of a nucleic acid molecule encoding a protein having an amino acid sequence selected from the group consisting of SEQ ID NO:92, SEQ ID NO:97, SEQ ID NO:100, and SEQ ID NO:105.

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~~35~~ (New) The isolated protein of Claim ²~~34~~, wherein the protein has the amino acid sequence of SEQ ID NO:92.

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~~36~~ (New) The isolated protein of Claim ²~~34~~, wherein the protein has the amino acid sequence of SEQ ID NO:97.

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~~37~~ (New) The isolated protein of Claim ²~~34~~, wherein the protein has the amino acid sequence of SEQ ID NO:100.

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~~38~~ (New) The isolated protein of Claim ²~~34~~, wherein the protein has the amino acid sequence of SEQ ID NO:105.

301

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Sub 32
39. (New) An isolated protein having an amino acid sequence that is at least about 70 percent identical to an amino acid sequence selected from the group consisting of SEQ ID NO:92, SEQ ID NO:97, SEQ ID NO:100, and SEQ ID NO:105, wherein said protein elicits an immune response against a canine IL-13 protein or has IL-13 activity.

40. (New) A therapeutic composition comprising a therapeutic compound selected from the group consisting of:

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(a) the isolated protein of Claim 33;
(b) a mimotope of said protein of (a);
(c) a multimeric form of said protein of (a);
(d) an antibody that selectively binds to said protein of (a); and
(e) an inhibitor of an immunoregulatory protein activity identified by its ability to inhibit the activity of said protein of (a).

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41. (New) The composition of Claim 40⁸, wherein said composition further comprises a component selected from the group consisting of an excipient, an adjuvant and a carrier.

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42. (New) A method to regulate an immune response in an animal comprising administering to the animal the therapeutic composition of Claim 40⁸.

Sub 33
43. (New) The method of Claim 42, wherein said animal is selected from the group consisting of canids.

10
44. (New) The method of Claim 42¹⁰, wherein said composition further comprises a component selected from the group consisting of an excipient, an adjuvant and a carrier.